Environmental Protection Agency
National Dive Safety Program

2004 Annual Report

Introduction

This report is provided to the Environmental Protection Agency's (EPA) Safety, Health and Environmental Management Division (SHEMD) in accordance with EPA's Dive Safety Policy. This report represents a summary of the EPA's National Dive Safety Program activities, from October 1, 2003 through September 30, 2004. The annual reports from EPA Unit Dive Officer's (UDO) are the foundation for the information contained in this report. Copies of each UDO's Annual Report is available upon request

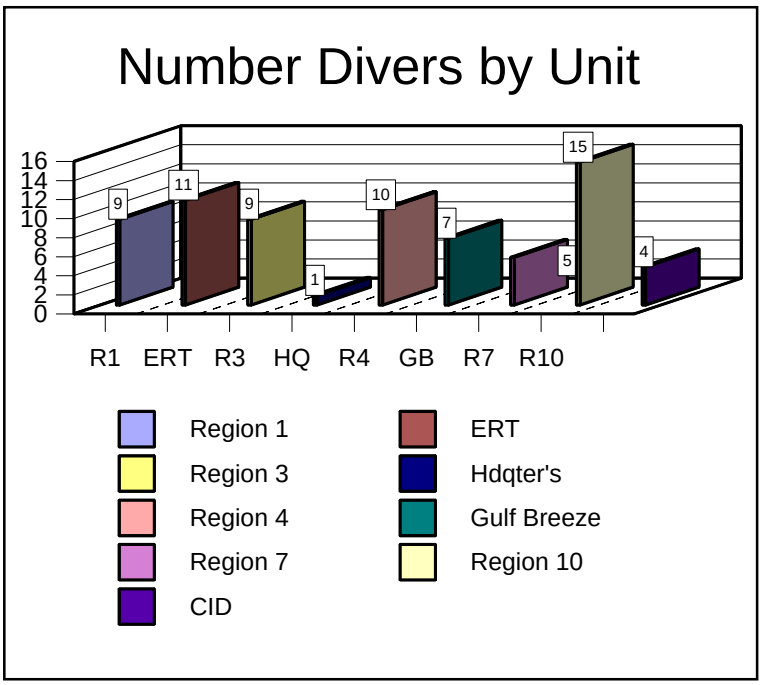
The EPA's National Dive Program performed 1,624 dives in 2004, involving 9 EPA dive units, with 71 divers. These dives were conducted in a variety of water bodies that include lakes, rivers, harbors, and open ocean. No serious injuries or accidents were reported.

Overview

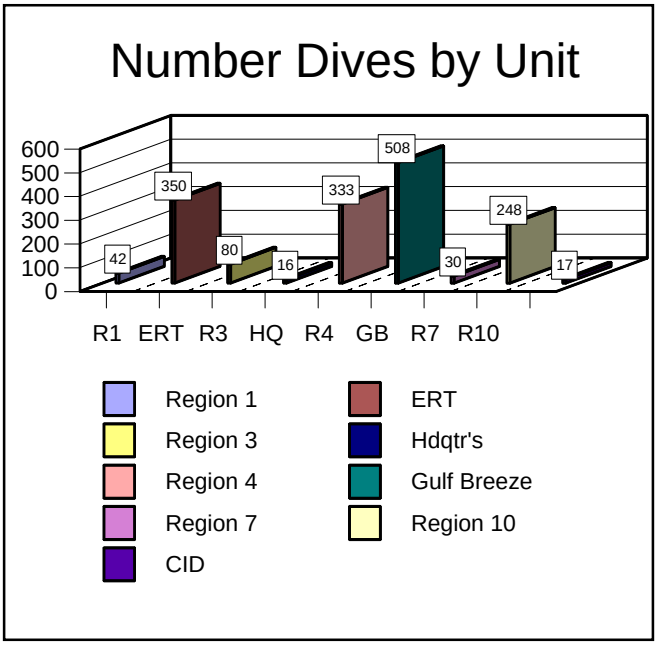
EPA's Dive Safety Program is represented nationally by nine regional dive units, each under the supervision of a Unit Dive Officer. The newest dive unit is the Criminal Investigation Division in Jacksonville Florida. The population of EPA divers fluctuates annually based on the number of divers that are currently qualified with the program. Qualification is based on medical compliance, diving proficiency, or other regulatory requirements.

It should be noted that three dive units are sponsoring EPA divers until they are able to establish their own independent unit.

- The Region 10 dive unit is sponsoring three divers from the EPA's Western Ecology Division.
- The Region 1 dive unit, at EPA's Atlantic Ecology Division (Narragansett), is sponsoring three divers in EPA's Region 1 Headquarters office.
- The Edison, NJ, Emergency Response Team is Sponsoring four divers from the EPA Regions 2, 5, 8, and 9.



NOTE: The above chart includes sponsored divers in R1, R10, and ERT



NOTE: The above chart considers working, training, proficiency dives and sponsored divers.

2004 EPA Diving Safety Board Meeting

The EPA Diving Safety Board held the 2004 Annual meeting in Cape May, New Jersey on September 21-23, 2003.

“Attachment 2" is a copy of the “Draft” minutes of the 2004 annual meeting.

Key Points:

- Establishment of a new dive unit for the Criminal Investigation Division (CID), in Jacksonville, Florida. Jim Pearsall was accepted as the UDO.
- Establishment of a new directorship - Special Operations Director. Alan Humphrey was elected as Director.
- Discussion of “Lessons learned from NASA recovery response”.
- National Response “Communications Strategy”.
- Support for a Region 6 dive unit that will be sponsored by Region 7 Dive Unit.
- Change in Diver Certification level. Drop “Working Diver”, adopt “Scientific Diver”.
- Report from Special Operations Workgroup.

Training

2004 EPA Diver Training Session:

The EPA Gulf Breeze Diver Training Center conducted the annual diver training program on May 10-14, 2005. Florida State University (FSU) was the primary instructor for this year’s class. There were a total of 43 participants in the 2004 class. Twenty one divers were certified as Scientific Divers and 6 as Dive Master. A total of 168 dives were completed during the training session.

The program offered training in the use of dry suits, AGA masks, EXO-26 mask, Superlite–27 helmet, surface supplied air and NITROX. Additionally, participants utilized surface/wireless communications, underwater sonar, underwater metal detectors, tools, and search and recovery methods. Certifications were awarded for Divemaster, Scientific Diver, Diving Accident Management, and Oxygen Enriched Air (NITROX).

Dive Activities

Highlights of activities from each dive unit are provided in attachment 1. This following is a summary of the Unit Dive Officer Annual Report’s. Copies of individual dive unit Annual Report’s are available upon request.

Attachment 1

Dive Unit Highlights

Regional Units:

Region 1 - Atlantic Ecology Division Dive Unit:

Activities included: Recovery of lost CTD, proficiency dives/training, benthic habitiat assesments, video taping sea floor conditions, collection of scallops, survey of dredge material disposal sites with Army Corp of Engineers, and performing sea grass transplants

Edison Emergency Response Team (ERT) Dive Unit:

The majority of ERT dives took place at Superfund sites around the country. Significant training events occurred in Salt Lake City, Utah and Gulf Breeze, Florida. In addition, the ERT Dive Team supported a sea grass survey and provided some training for U.S. Fish and Wildlife personnel in Vieques, Puerto Rico. The ERT Dive Team conducted a total of 151 working dives, 124 training dives, and 75 proficiency dives throughout the year. The increased number of training dives reflects training taken by several EPA divers in Regions VIII and IX, who may conduct work or training dives with ERT but do not yet have a dive team in their respective regions.

The ERT Dive Team will continue to function as a single Dive Unit supporting dive operations in all ten EPA Regions. Most of the Dive team equipment and personnel are located in Edison, New Jersey, with two more EPA-ERT divers now situated in Las Vegas, Nevada. The ERT Dive Team specializes in work on Superfund sites, contaminated water diving, surface supplied helmet diving, and underwater search operations.

Specific Operations:

1. Illegal Boat Dump-CID Investigation, USCG referral, Commencement Bay, Tacoma, WA. Assisted Region 10 Dive Team with assessment of sunken vessels identified as possible targets during a WDNR and WDOE side scan sonar survey. In May, ERT and EPA Seattle divers dove on a priority list of targets offshore of a private marina reputed to have sunken vessels deliberately during an insurance fraud scam. After initial attempts with the Video Ray ROV, SCUBA diving was done to evalute targets. The sector scan sonar and wireless comms were effectively used to guide divers to potential targets and reduce bottom time in 30-70 feet of water. Diving hazards included limited visibility, risk of entanglement on rigging and cables, sharp objects in debris piles, and variable depths during the same day of diving. Pollution

hazards are presented by numerous historically known industrial sources of sediment contamination and possibly unknown, ongoing events. Although not yet identified, sunken vessels may contain fuels, batteries, lubricants, coolants, or other contaminants.

2. Crown Vantage Landfill, NJ - Several dives were made in the Delaware River adjacent to a former paper plant landfill. Flood events have eroded one edge of the buried waste, exposing drums and waste materials. Shallow drift dives were conducted near the eastern bank for one to two miles in search of waste materials. Some debris was encountered but no hazardous materials were identified. Hazards encountered were swift and cold water.

3. Cuyuga Lake Site, NY - Two days of snorkeling, diving, and wading were conducted at the southwest extent of a large chlorinated solvents plume to determine if contaminated ground water was discharging into the lake via selected geological formations. One active seep was discovered in a large cove during the survey, with numerous other inactive vents identified. Searches were conducted by towing divers with a boat in shallow water or using buddy divers swimming transects. Conditions were ideal with good visibility.

4. Occidental Petroleum, WA- The ERT Dive Team assisted Region X divers with installation, sampling, and recovery of piezometer and passive diffusion samplers in the vicinity of Occidental Petroleum in Commencement Bay. The ERT put extensive effort into the design, testing, and installation of a suitable PDS device rugged enough to withstand the elements for several weeks. The ERT surface supply system was utilized on one of two field events. Hazards encountered were ship traffic, limited visibility, and polluted water.

5. Vieques Sea Grass Survey, PR- Took advantage of a unique opportunity at the invitation of the U.S. Fish and Wildlife Service. A number of their Refuge managers also dive on the job and they now conduct annual testing, including swimming, which is mandatory for their divers. We supported the training effort by providing instruction in surface supply and Cobra Tac navigation methods. During the same week the ERT, with their FWS representative, led a baseline sea grass survey in which all divers participated in the collection of biomass data through the use of one meter quadrats on transects. This study is being done to document conditions prior to construction of a ferry terminal at the former Navy Pier, currently known as Mosquito Pier. The week of training and scientific diving was an excellent opportunity for all parties to get refresher training and assist with a scientific survey.

6. Manistique Harbor Site, MI- Conducted two days of diving to retrieve fish cages placed during a post removal assessment of current sediment conditions after an extensive PCB dredging removal project. The cages were used to determine if fish uptake of residual PCBs is still an issue. ERT had planned to collect over 300 sediment core samples using divers like we did in previous years but Region V remedial decided to collect grab samples using a ponar from a boat. Diving hazards- vessel traffic, low visibility, and potential contamination.

7. Intermediate Lake Drum Removal-September was a busy month for us in Michigan, this site involved assessment and removal of seven 55 gallon drums discovered by law enforcement

training divers. Due to their unknown contents, close proximity to a public beach, and high recreational use, the OSC decided that an immediate removal action was required. Due to the need for an expedited removal and the general conditions- twenty feet of water, good visibility, only 100 feet from shore, nearby vehicle access, and a small number of drums, the ERT decided to conduct the overpacking and removal the following day. With the support of the OSC's hazmat contractor and excellent local, County, and State support, the entire job took less than one day. Steel and poly overpacks and closed lift bags were used, with steel being much easier to handle. There was no evidence of drum rupture or damage during the overpacking of drums which appeared to be intact. Later staging and sampling indicated no hazardous materials were present and disposal costs were minimal. This situation highlighted the capability of an EPA OSC who is also an EPA diver, rapid decisions can be made when the right mix of skills, equipment, and local support is available. Diving hazards - Drums with unknown contents.

8. Higgins Lake Drum Recovery- Similar to Intermediate Lake case, but drums were lashed to an underwater swim platform used by a local dive shop. A poly drum washed up on shore and MDEQ determined a low concentration of acetone was present. They requested removal of four poly and four steel drums, before someone possibly came in contact with the contents. We assessed the area, 1000 feet offshore in 40 feet of water, and remobilized with additional equipment, including surface supply, to conduct the removal. All the steel drums appeared to be intact, several of the poly drums were open. Due to the possibility of rupture, only the steel drums were overpacked. The overpacks with liftbags were towed to a State boat ramp for loading to a truck. The State lab found one drum with acetone. Additional visual assessments were done in two areas, on the west side near a boat ramp and over Sunken Island. One area was rumored to contain drums, the other possibly drums or construction debris from former highway construction projects. With the excellent visibility three divers could survey a large area with one tank of air. An EPA OSC diver again was instrumental in diving operations and decision making on the feasibility of conducting the drum removal. Diving hazards- Drums with unknown contents.

Region 3 Dive Unit:

Artificial Reef: Red Bird Subway Cars, Rehoboth DE-New York Transit Authority Subway and Light Rail Cars are being used for Artificial Reef Program. These cars were placed off the coast of Delaware two years ago. Additional dives were made on "control" subway cars placed off Point Pleasant, New Jersey. Sites were sampled for asbestos, epifauna, fish, and structural integrity.

Training Dives: Conducted at Dutch Springs Quarry Allentown PA. Dives were performed in April and May. Dry Suit and Equipment Checkout dives were conducted. A new diver trainee was checked out prior to the National training session. A new metal detector was tested.

Pensacola Training: William Muir and Jim Gouvas attended the annual training in May and participated in assisting training and worked with dive masters. A new diver trainee went

through the course.

Point Pleasant: Team dove at the rail bridge at Point Pleasant, New Jersey sampling for epifauna and using hard line communications.

Annual Small boat training and demonstration of diving from boat at Fort Mifflin. Number of Dives 2 training dives in full Aga, Viking

Enforcement action in Schuylkill River, at Philadelphia STP. August dive operations for CID and FBI. Aga, Viking and full decon protocol.

Combination of sport and training and proficiency dives during of "Other" Artificial Reef Structures, Pt Pleasant and Atlantic City NJ-These structures were mostly wrecked or sunken ships used for artificial Reef s off the coast of New Jersey. No samples collected.

Dive Incident:

One diver suffered a stroke on April 9, 2004 at Dutch Springs, Pennsylvania during a planned training exercise for the unit.

The incident occurred as he was performing a walking entry into the quarry and before he was submerged. Team members responded immediately and properly. First aid was administered while waiting for arrival of the ambulanc.

A Cat Scan was performed on the diver and it was determined he had experienced a stroke.

The diver returned to work in July part time and full time in August. He has made an almost complete recovery but still has some minor speech problems which he is going to a speech therapist. A report was provided to the Chairman of the Dive Safety Board.

Headquarters Dive Unit:

All dives were performed as proficiency dives.

Region 4 Dive Unit:

Sediment oxygen demand/nutrient studies: Sediment oxygen demand (SOD) rates are determined through the deployment of aluminum chambers over the bottom sediments. Four replicates and two 'blank' chambers are deployed at each station. The replicate chambers are sealed directly to the bottom while the blank chambers are sealed as a unit and are not in contact with the bottom sediments. The blank chambers are filled with ambient water to measure the water column respiration. Nutrient exchange studies are conducted with the same chambers and requires a long incubation period, generally all day or over night. Water samples are then pulled from the chambers by divers and analyzed for nutrients. SOD and nutrient exchange studies are both conducted in aerobic conditions. A similar study to nutrient exchange but conducted in

anaerobic conditions is the anaerobic sediment gas exchange study. Samples from this study are analyzed for methane, ammonia and sulfides. Pollutants/hazards. Pollutants: wastewater treatment plants, paper mill discharges and other industrial discharges. Hazards: zero visibility, strong currents, marine sting-bites, alligators, snakes, limbs, stumps, fishing line, debris. Biggest hazard is potential for entanglement w/ 18 lines/cables between chambers and boat.

Ocean Dredged Material Disposal Sites: These surveys are to determine the sedimentological, water quality and benthic infaunal characteristics in areas within and adjacent to the influence of dredged material disposal. Divers are responsible for collecting sediment cores for laboratory analysis and benthic macroinvertebrate analysis, as well as taking bottom photographs and recording observations.

Current Meter Deployment: Deployment and retrieval of current meters for NOAA and EPA at ocean outfalls and Ocean Dredged Material Disposal Sites (ODMDS). A lift bag was utilized for the deployment and retrieval process.

R4 SESD divers also assisted the ORD Lab in Cincinnati, OH with the deployment and retrieval of sampling equipment utilized for collecting PCB samples on the Sangamo Weston/12 Mile Creek Superfund Remediation Study.

Gulf Ecology Division, Gulf Breeze Dive Unit:

Coral Disease Survey: Divers established monitoring stations as part of the Florida Keys Coral Disease Consortium Reef Assessment Program.

Submerged Aquatic Vegetation: GED divers supported the Submerged Aquatic Vegetation (SAV) for the lab.

Training Course Preperation: Barnacles and oysters were removed from the dive ladder and the pilings. Dives were made to test the equipment (Super-light 27, wireless, hard wire, EXO-26, & etc.) prior to diver training.

Annual EPA Diver Training: The Gulf Breeze Diver Training Center conducted the 2004 diver training May 10-14, 2004.

Region 7 Dive Unit:

Regional diving activities remained at a constant low level, from the previous reporting period.

The Unit's only dive activities involved maintaining proficiency requirements, with the exception of UDO Larson logging dives during the 2004 EPA Diver Training at Gulf Breeze.

The Unit was requested to provide Dive support to Region 5 for Manistique Harbor, the Unit was unable to provide this support do to schedule conflicts with Superfund Cleanup activities.

Region 10 Dive Unit:

Most of the Region 10 dive team's work this year was in support of Superfund remediation projects. We had 146 work dives, and 8 training dives. This compares to the long-term average of just over 100 work dives. During 2004, Region 10 had the following work projects:

- Wyckoff, Bainbridge Island, Dec.04 - Site of a former wood treatment facility. R10 dive team provided substantial support for this Superfund (SF) project over the years. Divers inspected the sediment cap area for integrity of "leaking" (where creosote pooling was noted before the marine-benthic remediation work was completed two years ago). A photo survey of the near-shore cap area, was also conducted.

- Lockheed Shipyard, West Waterway, Harbor Is., Seattle, Feb.04 - SF site where contaminated sediment was removed by clam-shell dredging. The dive team inspected the area and provided video documentation of problems, such as cratering and missed locations.

- East Waterway, Harbor Is., Seattle, Apr.& July04 - Also related to the lower Duwamish River, Harbor Is. SF project. Divers inspected the large dredged area between Harbor Is. and the main Seattle-side shore. Divers also documented outfall locations, including a major CSO. Video was provided to the Duwamish Team.

- Portland Harbor, Terminal 4, Willamette River, March04 - As part of the SF site characterization (over a large area of the harbor), this year the dive team concentrated on sediment sampling in and near to two slips with active terminals and freighters.

- Occidental Petroleum, Hylebos Waterway, Commencement Bay, Tacoma, June, July, Aug.04 - During at least three different weeks at this SF site, the dive team collected sediment, installed minipiezometers for groundwater sampling at the surface, and installed samplers with semi-permeable membranes. Locations of underwater "vents" and deposits were determined (caused by high pH, high silica content groundwater seepage). Some work was coordinated with monitoring work by the state Dept. of Ecology. Twice, the ERT-Edison, NJ scientists provided support for sampling and diving with surface-supply.
- Crow's Nest Marina, CID investigation, Commencement Bay, Tacoma - Multi-agency criminal investigation of an illegal boat dump. In March, the dive team dove on locations based on informants' testimony (lats. and longs. provided by the state DNR and Ecology (WDOE) departments. City and county police are also involved in this on-going project. WDNR, WDOE obtained side-scan sonar information on scores of targets. Combined with the work of Tacoma police and

insurance fraud personnel, a priority list for diving was provided. In May, ERT-Edison, NJ assisted us during several more days of investigations with their ROV, sector-scan sonar, and divers. Informant's information will again be used for dive targets at the end of October.

- Duwamish River Fish Exposure Study, July04 - We assisted Texas A&M researchers in their PCB and TPH exposure work. Caged fingerling salmon and sculpin were placed at several stations (based on sediment data results) for a one-week exposure. Bottom sediment and water samples were also collected.

- Rhone Poulenc, Duwamish River, Aug.04 - The dive team returned to this RCRA site for sediment core sampling and groundwater seepage sampling to assist in site characterization of this chemical manufacturing site. Our work was coordinated with on-shore sampling, low tide sampling efforts. The dive team also installed two Hydrolabs for long-term monitoring at one seepage meter. The Regional lab is analyzing the samples for metals and volatiles.

Training projects included:
Regular work projects reduced opportunities for training dive outings.

- In October, after requalification of a lapsed-diver, the training concentrated on rescue skills: techniques for removing an unconscious diver from the water, ABCs and patient assessment, initiation of CPR, and administration of emergency oxygen.

- During a January dive, the team continued to practice proficiency skills with BCD buoyancy/weighting, and familiarity with personal safety gear on or in BCDs. Divers a worked at maintaining still (including newly purchased digital still) and video camera proficiency.

- In May, diver trainee Tim Siwiec did a wet suit dive in Puget Sound as a shake-down before reentering NOAA training at the start of week two. Tim had to leave after 10 days of the three week course last September after incurring a middle ear infection. We also had a dive team recruit, Sharon Buza do a wet suit dive due to her long absence from diving; we determined that Sharon has potential for the team, unfortunately, the September training at NOAA is full.

Western Ecology Division

- Dive activities during 2004 consisted of proficiency and working dives to study eelgrass beds and characterize benthic organisms. Working dives included laying out an experimental grid and installation of root minirhizotron windows; developing and deploying a suction device for collecting benthic organisms; testing PAM fluorimetry for estimating photosynthetic yield; collecting eegrass

samples for biochemical analysis; and maintaining underwater data logging equipment. Recovery dive(s) were also conducted in an attempt to locate lost underwater instrumentation. Proficiency dives were performed as needed. All working dives were conducted in less than 15 ft of water at slack tide.

Criminal Investigative Division Dive Unit:

During this reporting period, all the dives conducted by CID were within Florida. The water bodies included various seaports, the Florida Keys Nation Marine Sanctuary, rivers as well as local quarries and canals. The CID Dive Team participated in training dives in local canals sea ports and waterways. There was no known pollutant exposure.

There was an approximately three month period of time in which CID Headquarters ceased diving activities for our team. Prior to resuming dive operations, UDO Pearsall conducted the require checkout dive with each team member. All diver's skill levels were up to standard.

CID coordinated a team of divers from EPA Region 4, FDEP/NOAA and CID to investigate the discharge of pollutants to the waters of the National Marine Sanctuary in the Florida Keys. Although the case was evidentially referred to the Region 4 for final disposition, the information gathered during the CID guided investigation was critical to the successful regulatory resolution.

Attachment 2

"DRAFT"

EPA Dive Safety Board Meeting

September 21 - 23, 2004
Cape May, New Jersey

ATTENDEES

Ken Potts	Headquarters, Chairman
Kevin Larson	Region 7, Technical Director
William Muir	Region 3
Jim Gouvas	Region 3
Alan Humphrey	ERT
Mel Parsons	Region 4
Sean Sheldrake	Region 10
Rob Pedersen	Region 10
Russ Ahlgren	AED
Chris Anderson	WED/Corvallis

The Dive Safety Manual

The wording of the manual concerning maintaining proficiency, needs to be looked at, Mel Parsons has requested a change in the wording, to satisfy his management. The manual currently states that a minimum, the diver must average two dive days per month. And that the diver must dive every six weeks to maintain proficiency and if it is missed then the diver needs to be re-qualified.

The wording should be changed to include the statement "at the discretion of the UDO", rather than having the six week requirement "mandated" by the current wording in the Dive Safety Manual. The current wording is based on the current NOAA dive manual. The Board may need to talk to NOAA about the six week requirement, the EPA Board does not want to do anything that will or could affect our reciprocity agreement.

It is recommended that the manual state that as a minimum an EPA diver should log at least 2 dives per month rather than two dive days per month. And if the diver has not logged a dive in a three month time period he must complete a program for requalification.

Mel Parsons brought up another policy issue. He had a diver that was trained and certified as an EPA diver several years ago as an intern. Now she is a contractor and his management wants her to once again be classified as an EPA certified diver. It has been several years since she has dove. Mel's opinion is that she needs to go back to Gulf Breeze to be retrained.

Either way, she would not be an EPA diver, she would be a diver that is EPA certified but is diving under the umbrella of her company. She would not be an EPA diver, but would be an EPA certified diver. Her company would remain liable for her.

Alan Humphrey passed out a handout/brochure that the ERT has put together for describing the Unit's dive capabilities. The Board was very supportive of the brochure, and its professional appearance.

Alan also presented a draft of developing a surface supply diving guidance/guide lines. It needs to be recognized that there are several different type of surface supply systems. More than one type of surface supply is currently being used within the Agency.

It was suggested that the write up on surface supply guidelines be incorporated into the EPA Dive Safety Manual as an appendix.

It was pointed out the several Units are using hard wire communications with a tether and this should not be confused with the draft guidelines that Alan developed. The guidelines were written for guidance for surface supplied operations and this needs to be emphasized to all Units.

The guidelines do emphasize the need for some additional training specific to surface supply diving, recognizing that surface supply diving is an advanced diving technique. Alan has stated that he is looking at additional training for surface supply diving and will be able to recommend an outside source or look at his Unit being capable of providing training. The thing to avoid is to have EPA divers getting last minute training on surface supply diving, right before they are entering the water with surface supplied.

It was suggested that there be a set of Standard Operating Procedures (SOPs) for different dive activities; i.e., surface supply diving, decontamination, sampling procedures; just as an example. These SOPs should not be confused with the guidelines that Alan presented to the Board.

Communication Strategy National Response

Bill Muir handed out a draft outline for activating EPA's Emergency Diving Response and Assistance Team. Bill needs feed back from the Board members as to any comments or changes that need to be incorporated into this draft outline.

It was emphasized that the divers covered by this outline, that would be part of the Team has to be EPA certified.

The Board re-affirmed that Alan Humphrey, as Special Operations Director, would be the lead for emergency response dive operations. In cases of Alan being unavailable, the response request would be handled by the Chairman of the Board who will designate an acting Special Operations Director for the event. The Special Operations Director would work with the UDOs as far as finding the best qualified divers for the particular circumstances of the response.

Each Unit needs to develop a list of divers that would be available for this type of special response operation. By doing this now, time would be saved in case of an emergency call out.

New Dive Unit

The Corvallis ORD WED Unit has requested to be recognized as a full EPA Dive Unit. They now have two dive masters and a total of six divers.

The one concern brought up by the Board was that the WED group has not submitted dive plans to the Region 10 Unit for approval. Region 10 did state that there was the issue of Region 10 signing off on dive plans without having a Region 10 dive master overseeing the dive.

The Board's decision is to have the Unit submit some of their dive plans for review and approval, and after the next three dive plan reviews then the Board will approve them as a Unit.

Special Operations

Alan Humphrey handed out a one page Policy/Procedure covering the newly established Special Operations Director.

It was noted that the Dive Manual is not consistent in the requirements for being a Director on the Board. The Board agreed that the Manual should state that the Chairman of the Board, Technical Director, Training Director, and Special Operations Director all must be EPA certified Dive Masters.

The Board discussed the length of term for the Special Operations Director, and since Alan is UDO for the ERT Unit, his term should be for as long as he is with the ERT Unit. The Board determined that the term should be the same as the other elected positions, three years.

As a point of order, the Board officially voted Jed Campbell as Training Director. The nomination and vote was necessary due to the retirement of Jim Patrick.

Decontamination Procedures

Rob Pedersen lead a discussion concerning decontamination procedures that should be considered for inclusion in the Manual as an appendix. The Region 10 procedures/protocol was discussed as an example, and was handed out to the Board members. The procedures handed out include actual decontamination procedures and decontamination stages on the boat, along with a procedures sheet for decontaminating the Aga Divator mask. Since we are EPA divers we need to have something in the manual establishing decontamination procedures and why it is needed.

Rob also passed out a possible procedure for testing the decontamination procedures that are being used. These procedures would involve inoculating the Viking suit with bacteria and then test various Betadine exposure times and its effectiveness.

The main point of concern is still the buoyancy compensator, and the inability to decontaminate the BC due to the material it is constructed with and the bladders within the BC. Along the same lines is the use of soft weights, these are also difficult to impossible to decontaminate.

Standby Diver/Tender Verbiage in Manual

The Board voted to accept and approve the wording change developed by Mel Parsons concerning the use of tender and stand by divers in EPA dive operations.

Other Issues

Bill Muir discussed the newest member of the Region 3 Dive Unit. She was checked out as far as diving in Region 3 before going to the training in Gulf Breeze. While at the training she was constantly assisted by her training team partners and for the exam she scored 62, but was still issued a certificate as passing the Scientific Diver Training. After the training Bill was told by the training director that this student still needed some help on some areas. Bill does not feel comfortable with this person doing dive operations, due to the poor performance on the exam.

The issue is that if a student at the training does not pass the training in Gulf Breeze, then as UDO Bill stated that he would rather have the student not pass the course and spend another year as a trainee diver.

Additional Policy Issues

Chris Anderson requested that three things be brought up: The first being that our requirements call for contacting the recompression chamber to make sure that it is up and ready in case of a dive emergency. Since emergency medical would be called first, do we still need the protocol? It was the consensus of the Board that this protocol remain in place.

The second item was concerning Jay Reichman, he is a member of the Corvallis Unit and has a large number of dives 1500 plus, and he is a certified instructor. Corvallis is wondering if

it is appropriate for Jay to perform this training. It would not be validated by the Agency but it is not a problem, if they wish to use Jay for additional training. The Board does see it as a problem at all, but as a good way to provide advanced training during dives.

The third thing is the fitness of the divers, Corvallis is trying to do something to encourage fitness among the divers. The discussion involved whether the Dive Safety Board could make the recommendation that EPA Divers be allocated an amount of time each week (three hours) of duty hours, for fitness activities at a fitness center. This will probably come down to individual personal offices. This may not be the proper time to attempt to push this nationally. Corvallis stated they would pursue it for themselves and report back at the next meeting.

Mel Parsons brought up a revision that Jed Campbell had drafted up concerning the different depth requirements in the Manual. Ken Potts stated that he will contact jed about this item.

Region 6 Dive Unit

Kevin Larson provided a briefing on the Region 6 divers. The main concern is that they do not have an EPA Dive Master to oversee their dives. Until they do have an EPA Dive Master, they are restricted to being able to do EPA dives unless they can get a Dive Master traveling down to oversee their dives. Until they have their own Dive Master they will be hard pressed to log many, if any, EPA dives.

Dan Young's performance at the training and his score on the test has raised a concern within the Board about his becoming an EPA Dive Master. Region 6 had a couple of their divers at Gulf Breeze in May 2004 did perform very well and would be good Dive Master candidates in May 2005. The requirement for Dive Master does state that the diver must have a minimum of 100 logged working dives in order to attend Dive Master training. This requirement needs to be enforced for not only Region 6 but for all Dive Master candidates.

Region 6 management has been advised that the only way the Region 6 divers will do any EPA dives, they must fund the travel for an EPA Dive Master to oversee the dives.

Dan has also requested that his supervisor be brought down to Gulf Breeze for Working Diver training, he is 70 years old and that does raise a concern about certifying a diver that age.

The Board's determination at this time, is that the Region 6 Unit move ahead slowly and they show the need to be performing EPA dives.

EPA Diver Training

The Board needs to communicate to Jed Campbell the concerns raised about the training of the divers in regards to drysuits and Aga masks. Right now the training is not mandating

drysuit diving with Aga's throughout the course. There is a tremendous difference in diving to sixty feet with a drysuit and Aga then the 10 foot depth done in training.

Several issues need to be discussed with Jed, as Training Director.

Location for Next Year's Safety Board Meeting

Ken Potts recommended that the location for next year consider travel costs in order to keep travel funding lower.

Corvallis has offered to host the meeting in Portland, Oregon.

Bill Muir also suggested the Board consider having the next meeting on the new EPA vessel the Bold. The ship is capable of having rooms for all the Board members. It would give the Board the opportunity to become familiar with the new ship. The only requirement is that it be located on the east coast.

Another suggested location was Catalina Island. There is a marine science/research and training center there that could be able to host the meeting. Rob Pederson will investigate the possibilities.

Ken Potts suggested that we meet on the Bold and have the Bold located at Wilmington, North Carolina. But it will be dependent upon the Bold's schedule, but Ken should know the Bold's schedule in January 2005. The Board agreed to try and hold the meeting on the Bold.

Another point that was discussed was the timing of the meeting, does the Board need to meet the last week of the fiscal year?

Minutes from the 2003 Meeting

The minutes from last year's meeting were approved and Kevin Larson will send out the approved minutes to all Board members.

Annual Unit Reports

The Units provided their annual reports electronically to Ken Potts and also briefed the Board. Emphasis was given to the Region 3 report which involved Bill Huffman's accident/stroke during their re-certification dive.

It was stated by Ken Potts that the Program needs to be made aware of all such incidents. The Chairman needs to be aware of incidents as soon as practical, because of inquiries that were made concerning this incident and would be happening for any incident.